

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786)315-2590 F (786) 31525-99

www.miamidade.gov/economy

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

Johns Manville Corporation 717 17th Street Denver, CO 80202

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Johns Manville Modified Bitumen Roofing Systems over Wood Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 13-0129.15 and consists of pages 1 through 27.

The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 1 of 27

ROOFING SYSTEM APPROVAL

<u>Category:</u> Roofing

Sub-Category: Modified Bitumen

Materials:SBSDeck Type:WoodMaximum Design Pressure:-82.5 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT: TABLE 1

		Tage	Duo duo4
Product	Dimensions	Test Specification	Product <u>Description</u>
DynaBase	39-3/8" x 49'2"	ASTM D6163	A glass reinforced SBS modified bitumen
Dynabase	39-3/8 X 49 Z	Type I Grade S	base sheet.
DynaBase PR	39-3/8" x 49'2"	ASTM D6164	A polyester reinforced SBS modified
Dynabase FK	39-3/8 X 49 Z	Type I Grade S	bitumen base sheet.
DynaWeld Base	39-3/8" x 32'10"	ASTM D6163	A glass reinforced SBS modified bitumen
Dylla Welu Dase	39-3/6 X 32 10	Type I Grade S	base sheet for heat welded applications.
DynaBase HW	39-3/8" x 49'2"	ASTM D 6163,	A glass reinforced SBS modified bitumen
Dynabase 11 w	37-3/0 X 47 Z	Type 1, Grade S	base sheet for heat welded applications.
DynaFast 180 S	39-3/8" x 49'2"	ASTM D 6164	A polyester reinforced SBS modified
Dynarast 160 S	39-3/8 X 49 Z	ASTM D 0104	
DymoFoot 190 HW	39-3/8" x 49'2"	ASTM D6164	bitumen base or inner ply sheet.
DynaFast 180 HW	39-3/8 X 49 Z	ASTM D0104	A polyester reinforced SBS modified
			bitumen base or inner ply sheet for use in
DymoEast 250 HW	39-3/8" x 32'10"	ASTM D6164	heat weld applications.
DynaFast 250 HW	39-3/8 X 32 10	ASTM D0104	A polyester reinforced SBS modified
			bitumen base or inner ply sheet for use in
DrwaClas	20. 2/9!! 22/10!!	A CTM D (1 (2	heat weld applications.
DynaGlas	39-3/8" x 32'10"	ASTM D6163	A glass reinforced SBS modified bitumen
D	20. 2/02 22/102	Type I Grade G	membrane surfaced with granules.
DynaWeld Cap FR	39-3/8" x 32'10"	ASTM D6163	A fire resistant, glass reinforced SBS
		Type I Grade G	modified bitumen membrane surfaced with
D	20. 2/02 22/102	A CTM D (1/2	granules for use in heat weld applications.
DynaWeld Cap FR	39-3/8" x 32'10"	ASTM D6163	A fire resistant, glass reinforced SBS
CR		Type I Grade G	modified bitumen membrane surfaced with
			granules and a white reflective coating for
D W 11 C 100	20.2/02. 22/102	ACTM DC164	use in heat weld applications
DynaWeld Cap 180	39-3/8" x 32'10"	ASTM D6164	A fire resistant, polyester reinforced SBS
FR		Type I Grade G	modified bitumen membrane surfaced with
D C1 20 FD	20.2/0122/102	ACTM DC162	granules for use in heat weld applications.
DynaGlas 30 FR	39-3/8" x 32'10"	ASTM D6163	A fire resistant, glass reinforced SBS
		Type I Grade G	modified bitumen membrane surfaced with
Daws Class ED	20.2/01 22/102	A CTM D (1/2	granules.
DynaGlas FR	39-3/8" x 32'10"	ASTM D6163	A fire resistant, glass reinforced SBS
		Type I Grade G	modified bitumen membrane surfaced with
Drug Clas ED CD	20.2/01/ 22/102	A CTM D(1/2	granules.
DynaGlas FR CR	39-3/8" x 32'10"	ASTM D6163	A fire resistant, glass reinforced SBS
		Type I Grade G	modified bitumen membrane surfaced with
			granules and a white reflective coating.



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 2 of 27

		Test	Product
Product	Dimensions	Specification	Description
DynaKap T1	39-3/8" x 32'10"	ASTM D6162	A composite reinforced SBS modified
		Type I Grade G	bitumen membrane surfaced with granules.
DynaKap FR T1	39-3/8" x 32'10"	ASTM D6162	A fire resistant, composite reinforced SBS
		Type I Grade G	modified bitumen membrane surfaced with
			granules.
DynaLastic 180	39-3/8" x 32'10"	ASTM D6164	A polyester reinforced SBS modified
D I ' 100 FD	20.2/01. 222102	Type I Grade G	bitumen membrane surfaced with granules.
DynaLastic 180 FR	39-3/8" x 32'10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with
		Type I Grade G	granules.
DynaLastic 180 S	39-3/8" x 32'10"	ASTM D6164	A polyester reinforced SBS modified
2 3 114240010 100 2	0,0,0 1102 10	Type I Grade S	bitumen base or inner ply sheet.
DynaWeld 180 S	39-3/8" x 32'10"	ASTM D6162	A composite reinforced SBS modified
,		Type I Grade S	bitumen base or inner ply sheet for use in
		• •	heat weld applications.
DynaWeld Cap 250	39-3/8" x 32'10"	ASTM D 6164	A fire resistant, polyester reinforced SBS
FR		Type II Grade G	modified bitumen membrane surfaced with
			granules for use in heat weld applications.
DynaWeld Cap 250	39-3/8" x 32'10"	ASTM D 6164	A fire resistant, polyester reinforced SBS
FR CR		Type II Grade G	
			granules and a reflective white coating for
DymoWald Con 250	20 2/9" - 22:10"	A CTM D 6164	use in heat weld applications.
DynaWeld Cap 250	39-3/8" x 32'10"	ASTM D 6164 Type II Grade G	A polyester reinforced SBS modified bitumen membrane surfaced with granules
		Type II Grade G	for use in heat weld applications.
DynaWeld 250 S	39-3/8" x 32'10"	ASTM D 6164	A polyester reinforced SBS modified
Dyna Weia 250 5	37 370 X 32 10	Type II Grade S	bitumen base or inner ply sheet for use in
		- JP	heat weld applications.
DynaPly T1	39-3/8" x 32'10"	ASTM D6162	A composite reinforced SBS modified
•		Type I Grade S	bitumen base or inner ply sheet.
DynaLastic 250 FR	39-3/8" x 32'10"	ASTM D6164	A fire resistant, polyester reinforced SBS
		Type II Grade G	modified bitumen membrane surfaced with
			granules.
DynaLastic 250 FR	39-3/8" x 32'10"	ASTM D6164	A fire resistant, polyester reinforced SBS
CR		Type II Grade G	modified bitumen membrane surfaced with
D I .: 070 C	20.2/01. 222102	ACTIVED (164	granules and a reflective white coating.
DynaLastic 250 S	39-3/8" x 32'10"	ASTM D 6164	A polyester reinforced SBS modified
DymoMoy ED	39-3/8" x 32'10"	Type II Grade S ASTM D6162	bitumen base or inner ply sheet.
DynaMax FR	39-3/8 X 32 10		A fire resistant, composite reinforced SBS modified bitumen membrane surfaced with
		Type III Grade G	granules.
DynaMax S	39-3/8" x 32'10"	ASTM D6162	A composite reinforced SBS modified
Dynamian 5	3) 3/0 A 32 10	Type III Grade S	bitumen base or inner ply sheet.
DynaClad	39-3/8" x 33'10"	ASTM D6298	A glass reinforced base sheet SBS modified
J			bitumen membrane surfaced with foil.
DynaBase XT	39-3/8" x 49'2"	ASTM D6163	A glass reinforced SBS modified bitumen
		Type I Grade S	base or inner ply sheet.



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 3 of 27

		Test	Product
Product	Dimensions	Specification	Description
DynaGlas FR XT	39-3/8" x 32'10"	ASTM D6163	A fire resistant, glass reinforced SBS
		Type I Grade G	modified bitumen membrane surfaced with
C1W	262 - 262	A CTN 4 D2000	granules.
GlasKap	36" x 36'	ASTM D3909	A mineral surfaced, asphalt coated, fiberglass cap sheet.
GlasKap CR	36" x 36'	ASTM D3909	A white mineral surfaced, white acrylic
Glubriup ert	30 A 30	1151111 25505	coated, fiberglass cap sheet.
Ventsulation Felt	36" x 36'	ASTM D4897	Heavy duty fiber glass base sheet
		Type II	impregnated and coated on both sides with
			asphalt with or without fine mineral stabilizer. Surfaced on the bottom side with
			coarse mineral granules embedded in
			asphaltic coating.
GlasBase Plus	36" x 108'	ASTM D4601	Type II asphalt impregnated and coated
			glass fiber base sheet for use in
			conventional and modified bitumen built-up roofing.
GlasPly IV	36" x 180'	ASTM D2178	Type IV asphalt impregnated glass felt for
		Type IV	use in conventional and modified bitumen
			built-up roofing.
GlasPly Premier	36" x 180'	ASTM D2178	Type VI asphalt impregnated glass felt for
		Type VI	use in conventional and modified bitumen built-up roofing.
PermaPly 28	36" x 106'	ASTM D4601	Type II asphalt impregnated and coated
1 4 111 13 2 0	50 11 100	Type II	glass fiber base sheet for use in
			conventional and modified bitumen built-up
E C (N C)		A CTN 4 C720	roofing.
FesCant Plus Cant Strips, and Taper	various	ASTM C728	Factory pre-fabricated cant strips and taper edge, manufactured from expanded perlite
Edge			insulation.
MBR Flashing	N/A	Proprietary	A two component elastomeric, cold
Cement Base and			application adhesive, consisting of a
Activator			modified proprietary compound with an
MBR Bonding	N/A	Proprietary	asphalt base. A two component urethane cold application
Adhesive	11/11	Tropiletary	adhesive.
MBR Cold	5, 55, and 350 gal,	ASTM D3019	One part, elastomeric cold application
Application		Type III	adhesive
Adhesive MBR Low VOC	5 gal	Proprietary	One part, asphalt modified urethane
Membrane Adhesive	3 gai	Troprictary	adhesive
MBR RA Membrane	1.5L Cartridge	Proprietary	Two part, cold process membrane adhesive
Adhesive	37/1		
JM Urethane Insulation Adhesive	N/A	Proprietary	Urethane insulation adhesive.
insulation Adhesive			



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 4 of 27

Product	Dimensions	Test Specification	Product Description
JM Two Part Urethane Insulation Adhesive	N/A	Proprietary	A two-part urethane insulation adhesive
Flex-I-Drain	various	BOCA 76-61 SBCCI 89204 UBC 3236	Two piece flexible drain system composed of a Noryl deck flange, a flexible neoprene bellows and no hub connection. Available in various sizes and styles for most retro-fit applications.
PC/PET RetroDrain	various	N/A	Engineered resin copolymer fabricated drain for retrofit applications.
USII RetroDrain	various	N/A	One piece, aluminum fabricated drain for retrofit applications.
SuperDome RetroDrain	various	N/A	Cast aluminum, heavy-duty drain for retrofit applications.
FP-10 Vents	10" deck flange, base diameter of 4" and a height of 6"	N/A	One-way roof vent, designed for use in various roof systems, for the release of pressure created by gases or moisture vapor trapped within the roofing system.
Expand-O-Guard	various	N/A	Elastomeric expansion joint cover for vertical expansion and seismic joints. Manufactured from non-reinforced, form-supported elastomeric bellows with a bifurcated waterproof attachment to metal flanges.
Expand-O-Flash	various	N/A	Expansion joint covers manufactured from non-reinforced, form-supported elastomeric bellows with a bifurcated waterproof attachment to metal flanges.
Presto-Lok Fascia and Flashing System	various	TAS 114	A multi-piece fascia and flashing system for built-up and modified bitumen roofing systems manufactured from aluminum or steel.
DynaTred & DynaTred Plus Roof Walkway	various	N/A	Preformed, skid-resistant boards.



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 5 of 27

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI	Isocyanurate Insulation.	Johns Manville
ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI	Isocyanurate Insulation with glass reinforced facers	Johns Manville
ENRGY 3 FR	Isocyanurate Insulation with inorganic coated glass reinforced facers; bottom face is premium coated for combustible decks.	Johns Manville
Fesco Foam, DuraFoam	Isocyanurate Insulation with perlite facer	Johns Manville
Retro-Fit Board, DuraBoard	A high-density perlite roof insulation.	Johns Manville
Fesco Board	Rigid perlite roof insulation board.	Johns Manville
Invinsa Roof Board	High density polyisocyanurate board	Johns Manville
JM SECUROCK Gypsum-Fiber Roof Board	Rigid, gypsum-based board stock	Johns Manville
DensDeck, DensDeck Prime	Silicon treated gypsum	Georgia Pacific Gypsum, LLC



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 6 of 27

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	UltraFast Fastener	Insulation fastener for wood and steel.	Various	Johns Manville
2.	UltraFast ASAP	Pre-assembled Insulation fastener and plate	Various	Johns Manville
3.	UltraFast 3" Round Metal Plate or UltraFast Square Recessed Metal Plate	Galvalume AZ55 steel plate	3" square & 3" round	Johns Manville
4.	UltraFast Plastic Plate	High Density Polyolefin round plate	3" round	Johns Manville
5.	High Load Fasteners	Insulation and membrane fastener for steel, wood, or concrete	#15 x 14" max.	Johns Manville
6.	High Load Plate	Seam plate with reinforcing ribs and eyehooks	2-3/8" round steel plate	Johns Manville
7.	High Load LH	#15 Large Head fastener for steel, wood, or concrete	#15 x 14" max.	Johns Manville
8.	Polymer Membrane Batten	Plastic membrane batten strips	1" x 250' coil	Johns Manville
10.	APB Plates	Seam plate with reinforcing ribs and barbs	2" round	Johns Manville
11.	Deep Well Batten Bar	galvalume coated steel membrane batten	1" x 100' coil	Altenloh, Brink & Co. U.S., Inc.



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 7 of 27

EVIDENCE SUBMITTED:

Test Agency/Identifier	<u>Name</u>	<u>Report</u>	<u>Date</u>
Underwriters Laboratories, Inc.	R10167	UL 790	05/27/13
Factory Mutual Research	3001482	FM 4470	08/11/98
,	3001629	FM 4470	09/10/98
	0Z8A9.AM	FM 4470	09/10/98
	3D4A4.AM	FM 4470	09/28/98
	3009499	FM 4470	04/04/01
	3007148	FM 4450	04/19/00
	3009499	FM 4470	04/04/01
	3011248	FM 4470	11/01/02
	3001457	FM 4470	04/04/02
	3014090	FM 4470	09/05/02
	3012974	FM 4450	06/03/02
	3026130	FM 4470	04/26/09
	3037540	FM 4470	10/20/10
Exterior Research & Design	#4361-2.04.97-1	TAS 114	02/04/97
	#10390A-12.97-1	TAS 114	12/00/97
	10391.01.03	TAS 114	01/29/03
	00257.03.05-1	ASTM D6162/D6163 ASTM D6164/D6298	03/17/05
m: :/ lenn	17(70.06.00		06/16/00
Trinity ERD	J7670.06.08	ASTM D3909	06/16/08
	J6990.12.07	ASTM D6162/D6164	12/03/07
	J17040.11.09	ASTM D6164	11/16/09
	J13700.05.10-1-R1 J13700.05.10-2	ASTM D5147/D6163 ASTM D5147/D6164	01/25/11 05/11/10
	J45020.07.13	TAS 114	07/12/13
IRT, Inc.	#99004	TAS 114	03/00/99
Atlantic & Caribbean Roof	ACRC 03017	TAS 114	09/30/03
Consulting, LLC	ACRC 06-005	TAS 114	03/27/06
IRT-ARCON Inc.	02-026	TAS 114	07/26/02
THE THEORY MC.	02-011	1715 111	02/06/02
PRI Construction Materials	JMC-066-02-01	ASTM D6163	06/04/12
Technologies, LLC	JMC-065-02-01	ASTM D6163	05/29/12
3	JMC-070-02-01	ASTM D2178 Type IV	04/17/12
	JMC-071-02-01	ASTM D2178 Type VI	04/17/12
	JMC-072-02-01	ASTM D4601 Type II	06/14/12
	JMC-074-02-01	ASTM D4897 Type II	04/17/12
	JMC-075-02-04.2	ASTM D5147/D6164 Type II	12/27/13
	JMC-078-02-01	ASTM D5147/D6298	07/17/12
	JMC-091-02-01	ASTM D4601 Type I	06/04/12
	JMC-093-02-01	ASTM D4601 Type II	08/02/12
	JMC-081-02-01.02	TAS 117 B & C	06/11/12
	JMC-105-02-01	ASTM D5147/D6162	05/22/13
	JMC-106-02-01	ASTM D6164	04/15/13



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 8 of 27

EVIDENCE SUBMITTED: (CONTINUED):

Test Agency/Identifier	<u>Name</u>	Report	Date
	JMC-107-02-01 Rev 4	ASTM D903	11/01/13
		ASTM D1876	
		ASTM D5147	
		TAS 117(B)	
		TAS 117(A)	
		TAS 114(C)	
	JMC-108-02-01	FM 4474 (D)/TAS 114 (J)	04/16/13
	JMC-113-02-01	ASTM D 6164	04/19/13
	JMC-126-02-01	FM 4474 (D)/TAS 114 (J)	04/17/13
	JMC-141-02-01	FM 4474 (D)/TAS 114 (J)	04/18/13
	JMC-171-02-01	ASTM D6163	01/10/14
	JMC-171-02-02	ASTM D6163	01/10/14
	JMC-171-02-10	ASTM D6162	01/10/14
	JMC-171-02-03	ASTM D6164	01/10/14



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 9 of 27

APPROVED ASSEMBLIES

Membrane Type: SBS

Deck Type 1I: Wood, Insulated

Deck Description: $^{19}/_{32}$ " or greater plywood or wood plank, fastened with #8 screws.

System Type A(1): Anchor sheet mechanically fastened; all layers of insulation fully adhered with

approved asphalt.

All General and System limitations apply.

Anchor Sheet: One ply of GlasPly Premier, PermaPly 28 or Ventsulation fastened to the deck as

described below:

Fastening: Anchor sheet shall be lapped 3" and fastened with 12 ga. annular ring shank nails

and 1-5/8" diameter tin caps 9" o.c. in the lap and two rows staggered in the center

of the sheet 9" o.c.

One or more layers of any of the following insulations:

Base Insulation Layer Insulation Fasteners Fastener (Table 3) Density/ft²

ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF,

ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI

Minimum 1.3" thick N/A N/A

Base or Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
Fesco Foam, DuraFoam		
Minimum 1.5" thick	N/A	N/A
Fesco Board		
Minimum ¾" thick	N/A	N/A
Retro-Fit Board, DuraBoard		
Minimum 1/2" thick	N/A	N/A

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: (Optional) One ply of PermaPly 28, DynaBase, DynaBase XT or GlasBase Plus

adhered to the insulated substrate in a full mopping of approved asphalt applied

within the EVT range and at a rate of 20-40 lbs./sq.



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14

Page 10 of 27

Ply Sheet:

(Optional) One or more plies of GlasPly Premier, Glas Ply IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the a base sheet or perlite top layer with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane:

One or more plies of DynaKap T1, DynaKap FR T1, DynaMax FR, DynaGlas, DynaGlas FR, DynaGlas FR CR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR or DynaPly T1 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld

Cap 250 FR or DynaWeld Cap 250 FR CR heat welded.

Or

(Only with a modified Base or Ply sheet) GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing:

(Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq., respectively.

2. GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Maximum Design

Pressure:

-60 psf. (See General Limitation #7).



NOA No.: 13-0529.14 **Expiration Date: 07/19/16** Approval Date: 03/06/14

Page 11 of 27

Deck Type 1I: Wood, Insulated

Deck Description: 19/32" or greater plywood or wood plank, fastened with #12-3" Olympic STD

screws @ 6" o.c.

System Type A(2): Anchor sheet mechanically fastened; all layers of insulation fully adhered with

approved asphalt.

All General and System limitations apply.

Anchor Sheet: One ply of GlasPly Premier, PermaPly 28 or Ventsulation fastened to the deck as

described below:

Fastening: Anchor sheet shall be lapped 3" and fastened with JM Ultrafast screws and 3"

plates, 8" o.c. at the lap and three rows staggered in the center of the sheet 8" o.c..

One or more layers of any of the following insulations:

Base Insulation Layer	Insulation Fasteners	Fastener
	(Table 3)	Density/ft ²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm	25 PSI, R-Panel, R-Panel 25 F	SI, ENRGY 3
ACE ENRCY 3 ACE 25 PSI ValuTherm ACE ValuT	Therm ACF 25 PSI ENRCV 3	ACF

AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF,

ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI

Minimum 1.3" thick	N/A	N/A
Base or Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
Fesco Foam, DuraFoam Minimum 1.5" thick	N/A	N/A
Fesco Board Minimum ¾" thick	N/A	N/A
Retro-Fit Board, DuraBoard		

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: (Optional if ply sheet used) One ply of PermaPly 28, DynaBase, DynaBase XT or

GlasBase Plus adhered to the insulated substrate in a full mopping of approved

N/A

asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.



Minimum 1/2" thick

NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14

Page 12 of 27

N/A

Ply Sheet:

(Optional if base sheet used) One or more plies of GlasPly Premier, Glas Ply IV, DynaLastic 180S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the a base sheet or perlite top layer with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane:

One or more plies of DynaKap T1, DynaKap FR T1, DynaMax FR, DynaGlas, DynaGlas FR, DynaGlas FR CR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR or DynaPly T1 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld

Cap 250 FR or DynaWeld Cap 250 FR CR heat welded.

Or

(Only with a modified Base or Ply sheet) GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing:

(Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq., respectively.

2. GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Maximum Design

Pressure:

-52.5 psf. (See General Limitation #7).



NOA No.: 13-0529.14 **Expiration Date: 07/19/16** Approval Date: 03/06/14

Page 13 of 27

Deck Type 1I: Wood, Insulated

Deck Description: $^{15}/_{32}$ " or greater plywood or wood plank

System Type A(3): Anchor sheet mechanically fastened; all layers of insulation fully adhered with

approved asphalt.

All General and System limitations apply.

Anchor Sheet: Two plies of PermaPly 28, DynaBase, GlasBase Plus, or Ventsulation fastened to

the deck as described below:

Fastening: Anchor sheet shall be lapped 4" and fastened with approved roofing nails and tin

caps 9" o.c. at the lap and two rows staggered in the center of the sheet 12" o.c.

One or more layers of any of the following insulations:

Base Insulation Layer Insulation Fasteners Fastener (Table 3) Density/ft²

ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF,

ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI

Minimum 1.3" thick N/A N/A

Base or Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
Fesco Foam, DuraFoam Minimum 1.5" thick	N/A	N/A
Fesco Board Minimum ¾" thick	N/A	N/A
Retro-Fit Board, DuraBoard Minimum ½" thick	N/A	N/A

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: (Optional) One ply of PermaPly 28, DynaBase, DynaBase XT or GlasBase Plus

adhered to the insulated substrate in a full mopping of approved asphalt applied

within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: (Optional) One or more plies of GlasPly Premier, Glas Ply IV, DynaLastic 180S,

DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the a base sheet or perlite top layer with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast

180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 14 of 27



Membrane:

One or more plies of DynaKap T1, DynaKap FR T1, DynaMax FR, DynaGlas, DynaGlas FR, DynaGlas FR CR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR or DynaPly T1 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld Cap 250 FR or DynaWeld Cap 250 FR CR heat welded.

Or

(Only with a modified Base or Ply sheet) GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing:

(Optional) Install one of the following:

- 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq., respectively.
- 2. GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Maximum Design

Pressure:

-52.5 psf. (See General Limitation #7).



NOA No.: 13-0529.14 **Expiration Date: 07/19/16** Approval Date: 03/06/14

Page 15 of 27

Deck Type 1I: Wood, Insulated

Deck Description: $^{19}/_{32}$ " or greater plywood over supports spaced 24" o.c. and attached with 10d

nails spaced 4" o.c. at panel edges and 8d nails spaced 6" o.c. at center supports

or wood plank

System Type B: Base layer of insulation mechanically attached, top layer fully adhered with

approved asphalt or adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

Base Insulation Layer Insulation Fasteners (Table 3) Density/ft²

ENDCV 3 ENDCV 3 25 PSI VoluThorm VoluThorm 25 PSI P. Bonel 25 PSI

ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI Minimum 1.5" thick 1 with 3 or 2

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Top Insulation Layer Insulation Fasteners (Table 3) Density/ft²

DuraBoard N/A N/A

Note: Top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² or with MBR Bonding Adhesive with a notched squeegee at 2 gallons per square. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Base Sheet: (Optional) One ply of PermaPly 28, DynaBase, DynaBase XT or GlasBase Plus

adhered to the insulated substrate in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding

Adhesive with a notched squeegee at 1.5 to 2.0 gallons per square.

Ply Sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT,

DynaMax S, GlasBase Plus, PermaPly 28, GlasPly Premier, Glas Ply IV,

DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S or DynaPly T1 adhered to the a base sheet or insulation top layer with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive with a notched squeegee at 1.5 to 2.0 gallons per square or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld

250 S or DynaFast 250 HW heat welded to a base sheet.



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 16 of 27

1:1.3 ft²

Membrane:

One or more plies of DynaKap T1, DynaKap FR T1, DynaMax FR, DynaGlas, DynaGlas FR, DynaGlas FR CR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR or DynaPly T1 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive with a notched squeegee at 1.5 to 2.0 gallons per square or one ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld Cap 250 FR or DynaWeld Cap 250 FR CR heat welded. Or

(Only with a modified Base or Ply sheet) GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive with a notched squeegee at 1.5 to 2.0 gallons per square.

Surfacing:

(Optional) Install one of the following:

- 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq., respectively.
- 2. GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Maximum Design

Pressure:

-60 psf. (See General Limitation #7).



NOA No.: 13-0529.14 **Expiration Date: 07/19/16** Approval Date: 03/06/14

Page 17 of 27

Deck Type 1I: Wood, Insulated

Deck Description: ¹⁹/₃₂" or greater plywood or wood plank, fastened with #12-3" Olympic STD

screws @ 6" o.c.

System Type D(1): All layers of insulation and base sheet simultaneously mechanically fastened.

All General and System limitations apply.

One or more layers of any of the following insulations:

Insulation Layer Insulation Fasteners Fastener (Table 3) Fastener Density/ft²

ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI

25 PSI Minimum 1.3" thick	N/A	N/A
Fesco Foam, DuraFoam Minimum 1.5" thick	N/A	N/A
Fesco Board Minimum ¾" thick	N/A	N/A
Retro-Fit Board, DuraBoard Minimum ½" thick	N/A	N/A
DensDeck, DensDeck Prime, SECUROCK, Invinsa Roof Board		

Minimum 1/4" thick

N/A

N/A

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet: One ply of GlasPly Premier, PermaPly 28 or Ventsulation fastened to the deck as

described below:

Fastening: Fasten base sheet with JM UltraFast screws and 3" metal plates at 8" o.c. in the lap

and three additional rows in the field at 8" o.c.

Ply Sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT,

DynaMax S, GlasBase Plus, PermaPly 28, GlasPly Premier, Glas Ply IV,

DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S or DynaPly T1 adhered to the a base sheet or perlite top layer with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or

DynaFast 250 HW heat welded.



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 18 of 27 Membrane:

One or more plies of DynaKap T1, DynaKap FR T1, DynaMax FR, DynaGlas, DynaGlas FR, DynaGlas FR CR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR or DynaPly T1 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld Cap 250 FR or DynaWeld Cap 250 FR CR heat welded.

Or

(Only with a modified Base or Ply sheet) GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing:

(Optional) Install one of the following:

- 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq., respectively.
- 2. GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Maximum Design

Pressure: -52.5 psf. (See General Limitation #7).



NOA No.: 13-0529.14 **Expiration Date: 07/19/16** Approval Date: 03/06/14

Page 19 of 27

Deck Type 1I: Wood, Insulated

Deck Description: $^{19}/_{32}$ " or greater plywood or wood plank for new construction, $^{15}/_{32}$ " or greater

plywood or wood plank fastened with #8 screws @ 6" o.c.

System Type D(2): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply.

Base or Top Insulation Layer

Insulation Fasteners Fastener (Table 3) Fastener Density/ft²

ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI

Minimum 1.5" thick N/A N/A

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 HW, DynaFast 180 S, or DynaFast 250 HW

mechanically fastened through the optional insulation with High Load LH Fastener and Polymer Membrane Batten or High Load Fastener and Deep well Batten Bar spaced 6" o.c. in the center of the minimum 4" torch welded side laps.

Ply Sheet: (Optional) One or more plies of DynaFast 180 HW, DynaWeld 250 S or DynaFast

250 HW heat welded while maintaining minimum 4" side laps and 6" end laps.

Membrane: One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap 180 FR,

DynaWeld Cap 250, DynaWeld Cap 250 FR or DynaWeld Cap 250 FR CR heat

welded while maintaining 4" side laps and 6" end laps.

Maximum Design

Pressure: -82.5 psf. (See General Limitation #7).



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 20 of 27

Deck Type 1I: Wood, Insulated

Deck Description: $^{19}/_{32}$ " or greater plywood or wood plank for new construction, $^{15}/_{32}$ " or greater

plywood or wood plank fastened with #8 screws @ 6" o.c.

System Type D(3): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply.

Base or Top Insulation Layer

Insulation Fasteners Fastener (Table 3) Fastener Density/ft²

ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI

Minimum 1.5" thick N/A N/A

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S mechanically fastened through the optional insulation

with High Load LH Fastener and Polymer Membrane Batten or HIgh Load Fastener and Deep well Batten Bar spaced 6" o.c. in the center of the minimum 4"

torch welded side laps.

Ply Sheet: (Optional) One or more plies of DynaFast 180 S, DynaPly T1 or DynaLastic 250 S

adhered in MBR Cold Application Adhesive at a rate of 1.5-2 gal./sq. or approved

asphalt with the EVT range at a rate of 20-40 lbs./sq

Membrane: One ply of DynaGlas FR, DynaLastic 180, DynaLastic 180 FR, DynaGlas FR XT,

DynaKap FR T1, DynaMax FR, DynaLastic 250 FR or DynaLastic 250 FR CR adhered in MBR Cold Application Adhesive at a rate of 1.5-2 gal./sq. or approved asphalt with the EVT range at a rate of 20-40 lbs./sq. while maintaining 4" side

laps and 6" end laps.

Maximum Design

Pressure: -82.5 psf. (See General Limitation #7).

MIAMI-DADE COUNTY
APPROVED

NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14

Page 21 of 27

Deck Type 11: Wood, Insulated

Deck Description: $^{19}/_{32}$ " or greater plywood or wood plank for new construction, $^{15}/_{32}$ " or greater

plywood or wood plank fastened with #8 screws @ 6" o.c.

System Type D(4): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply.

Base or Top Insulation Layer

Insulation Fasteners Fastener (Table 3) Fastener Density/ft²

ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI

Minimum 1.5" thick N/A N/A

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 HW, DynaFast 180 S, or DynaFast 250 HW

mechanically fastened through the optional insulation with High Load Fastener & APB Plates or High Load Plates spaced 9" o.c. in the center of the minmum 4"

torch welded side laps.

Ply Sheet: (Optional) One or more plies of DynaFast 180 HW, DynaWeld 250 S or DynaFast

250 HW heat welded while maintaining minimum 4" side laps and 6" end laps.

Membrane: One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap 180 FR,

DynaWeld Cap 250, DynaWeld Cap 250 FR or DynaWeld Cap 250 FR CR heat

welded while maintaining 4" side laps and 6" end laps.

Maximum Design

Pressure: -60 psf. (See General Limitation #7).

MIAMI-DADE COUNTY
APPROVED

NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14

Page 22 of 27

Deck Type 11: Wood, Insulated

Deck Description: $^{19}/_{32}$ " or greater plywood or wood plank for new construction, $^{15}/_{32}$ " or greater

plywood or wood plank fastened with #8 screws @ 6" o.c.

System Type D(5): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply.

Base or Top Insulation Layer

Insulation Fasteners Fastener (Table 3) Fastener Density/ft²

ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI

Minimum 1.5" thick N/A N/A

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S mechanically fastened through the optional insulation

with High Load Fastener & APB Plates or High Load Plates spaced 9" o.c. in the

center of the minimum 4" torch welded side laps.

Ply Sheet: (Optional) One or more plies of DynaFast 180 S, DynaPly T1 or DynaLastic 250 S

adhered in MBR Cold Application Adhesive at a rate of 1.5-2 gal./sq. or approved

asphalt with the EVT range at a rate of 20-40 lbs./sq

Membrane: One ply of DynaGlas FR, DynaLastic 180, DynaLastic 180 FR, DynaGlas FR XT,

DynaKap FR T1, DynaMax FR, DynaLastic 250 FR or DynaLastic 250 FR CR adhered in MBR Cold Application Adhesive at a rate of 1.5-2 gal./sq. or approved asphalt with the EVT range at a rate of 20-40 lbs./sq. while maintaining 4" side

laps and 6" end laps.

Maximum Design

Pressure: -60 psf. (See General Limitation #7).

MIAMI-DADE COUNTY
APPROVED

NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14

Page 23 of 27

Deck Type 1: Wood, Non-insulated

Deck Description: $^{19}/_{32}$ " or greater plywood or wood plank decks

System Type E(1): Base sheet mechanically fastened.

All General and System limitations apply.

Base Sheet: Two plies of PermaPly 28, DynaBase, GlasBase Plus or Ventsulation fastened to

the deck as described below:

Fastening: Base sheet shall be lapped 4" and fastened with approved roofing nails and tin

caps 9" o.c. in the lap and two rows staggered in the center of the sheet 12" o.c..

Ply Sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT,

DynaMax S, GlasBase Plus, PermaPly 28, GlasPly Premier, Glas Ply IV,

DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S or DynaPly T1 adhered to the a base sheet or perlite top layer with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or

DynaFast 250 HW heat welded.

Membrane: One or more plies of DynaKap T1, DynaKap FR T1, DynaMax FR, DynaGlas,

DynaGlas FR, DynaGlas FR CR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR or DynaPly T1 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld

Cap 250 FR or DynaWeld Cap 250 FR CR heat welded.

Or

(Only with a modified Base or Ply sheet) GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-

40 lbs./sq.

Surfacing: (Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400

lbs./sq., respectively.

2. GlasKap or GlasKap CR adhered in a full mopping of approved asphalt

applied within the EVT range and at a rate of 20-40 lbs./sq.

Maximum Design

Pressure: -52.5 psf. (See General Limitation #7).



NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14

Page 24 of 27

Deck Type 1: Wood, Non-insulated

¹⁹/₃₂" or greater plywood or wood plank, fastened with #12-3" Olympic STD **Deck Description:**

screws @ 6" o.c.

System Type E(2): Base sheet mechanically fastened.

All General and System limitations apply.

Base Sheet: One ply of GlasPly Premier, PermaPly 28 or Ventsulation fastened to the deck as

described below:

Fastening: Base sheet shall be lapped 3" and fastened with JM UltraFast screws and 3" plates

8" o.c. in the lap and three rows staggered in the center of the sheet 8" o.c..

(Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT, Ply Sheet:

DynaMax S, GlasBase Plus, PermaPly 28, GlasPly Premier, Glas Ply IV,

DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S or DynaPly T1 adhered to the a base sheet or perlite top layer with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or

DynaFast 250 HW heat welded.

Membrane: One or more plies of DynaKap T1, DynaKap FR T1, DynaMax FR, DynaGlas,

DynaGlas FR, DynaGlas FR CR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR or DynaPly T1 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld

Cap 250 FR or DynaWeld Cap 250 FR CR heat welded.

Or

(Only with a modified Base or Ply sheet) GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-

40 lbs./sq.

Surfacing: (Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400

lbs./sq., respectively.

2. GlasKap or GlasKap CR adhered in a full mopping of approved asphalt

applied within the EVT range and at a rate of 20-40 lbs./sq.

Maximum Design

-52.5 psf. (See General Limitation #7). Pressure:



NOA No.: 13-0529.14 **Expiration Date: 07/19/16** Approval Date: 03/06/14

Page 25 of 27

Deck Type 1: Wood, Non-insulated

¹⁹/₃₂" or greater plywood or wood plank, fastened with #8 screws. **Deck Description:**

System Type E(3): Base sheet mechanically fastened.

All General and System limitations apply.

Base Sheet: One ply of GlasPly Premier, PermaPly 28 or Ventsulation fastened to the deck as

described below:

Base sheet shall be lapped 3" and fastened with 12 ga. annular ring shank nails and Fastening:

1-5/8" diameter tin caps 9" o.c. in the lap and two rows staggered in the center of

the sheet 9" o.c.

Ply Sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT,

> DynaMax S, GlasBase Plus, PermaPly 28, GlasPly Premier, Glas Ply IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S or DynaPly T1 adhered to

the a base sheet or perlite top layer with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or

DynaFast 250 HW heat welded.

Membrane: One or more plies of DynaKap T1, DynaKap FR T1, DynaMax FR, DynaGlas,

DynaGlas FR, DynaGlas FR CR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR or DynaPly T1 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld

Cap 250 FR or DynaWeld Cap 250 FR CR heat welded.

(Only with a modified Base or Ply sheet) GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-

40 lbs./sq.

Surfacing: (Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400

lbs./sq., respectively.

2. GlasKap or GlasKap CR adhered in a full mopping of approved asphalt

applied within the EVT range and at a rate of 20-40 lbs./sq.

Maximum Design

Pressure: -60 psf. (See General Limitation #7).



NOA No.: 13-0529.14 **Expiration Date: 07/19/16** Approval Date: 03/06/14

Page 26 of 27

WOOD DECK SYSTEM LIMITATIONS:

1 A slip sheet is required with Ply 4 and Ply 6 when used as a mechanically fastened base or anchor sheet.

GENERAL LIMITATIONS:

- 1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
- 2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
- 3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
- 4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.

Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.

- 5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. Insulation attachment shall not be acceptable.
- 6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
- 7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant (When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)
- 8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
- 9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). (When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)
- 10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE

MIAMI-DADE COUNTY
APPROVED

NOA No.: 13-0529.14 Expiration Date: 07/19/16 Approval Date: 03/06/14 Page 27 of 27